

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 22, 2010 has been entered.

### ***Maintained Rejections***

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18, 20-22, 25-34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over National Starch and Chemical Corp (GB 1,285,547) in view of Syed et al. (EP 0 829 255).

GB'547 discloses a hair setting composition comprising pregelatinized cationic high amylose containing starch (title, page 3, lines 85-91). The application of the composition to wet or dampened hair provides a film which can impart desirable properties such as body and smoothness (page 1, lines 16-28). The composition can

also be utilized as a crème rinse (conditioner) composition which deposits a film on the hair (page 2, lines 20-35). Crème rinse compositions, or hair conditioners, are rinsed out of the hair after application and deposit a film on the wet hair. Thereby meeting the limitations of claim 36, for application prior to rinsing. The amylose content is more than 50% by weight of the starch (page 1, lines 51-52). The high amylose starch is present in the amount of 1-6% by weight of the total composition (page 1, lines 47-49).

It is additionally disclosed the composition can be utilized as a crème rinse which is applied after the users hair is washed and serves to effectively balance or neutralize the inherent negative charge of the hair (page 2, lines 20-35).

The amylose may be from corn (page 2, lines 36-40). Other film forming ingredients may be added (page 2, lines 65-69).

GB'547 does not disclose applying the composition to artificially colored hair.

Syed discloses a hair protection composition and process for preserving chemically process hair during subsequent processing's by applying a composition comprising a starch hydrolysate (abstract). Chemical processes include dyes and bleaching (page 2, lines 15-16), which reads on Applicants artificially colored hair in the instant claims. Syed discloses repeated coloring and bleaching cause structural damage to the hair and suffer the disadvantage of causing excessive damage to hair fibers (page 2, lines 57-58). Syed further discloses film forming polymers such as polypolyquaterniums (page 5, lines 32-35).

Since it is well known, as disclosed by Syed, the color treatment of hair causes damage, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to have incorporated the amylose as disclosed by GB'547 since it is taught that the amylose provides a protective property to the hair, such as smoothness and body. Since the prior art discloses the same patient population, (i.e. those with color treated hair), application of the product to perform a moisturizing property, would also necessarily also perform the same functional property of providing durability and stability to the hair color. “[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer.”

*Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977)

Claims 18, 20-21, 23-25, and 28-36 rejected under 35 U.S.C. 103(a) as being unpatentable over Paul et al. (US 6,344,183) in view of Syed et al. (EP 0 829 255).

Paul discloses a hair cosmetic composition comprising nonionically derivatized starches (abstract). The starch is present from 0.5-15% of the composition (column 2, lines 36-38). Suitable starches include high amylose corn starch (column 3, lines 40-44). High amylose is at least about 45% by weight amylose (column 3, lines 47-49), which would reasonably read on claim 20's "about 50% by weight". Film forming agents can be included (column 1, lines 46-47).

The formulation may be in the form of lotions and creams (column 8, lines 1-2 and 45-48). Paul additionally discloses the starches can be included in shampoos and conditioners (column 8, lines 45-49), thereby meeting the limitations of claim 36.

Paul does not disclose applying the composition to artificially colored hair.

Syed discloses a hair protection composition and process for preserving chemically process hair during subsequent processing's by applying a composition comprising a starch hydrolysate (abstract). Chemical processes include dyes and bleaching (page 2, lines 15-16), which reads on Applicants artificially colored hair in the instant claims. Syed discloses repeated coloring and bleaching cause structural damage to the hair and suffer the disadvantage of causing excessive damage to hair fibers (page 2, lines 57-58). Syed further discloses film forming polymers such as polypolyquaterniums (page 5, lines 32-35).

Since it is well known, as disclosed by Syed, the color treatment of hair causes damage, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the amylose as disclosed by Paul since it is taught that the amylose provides a protective property to the hair, such as smoothness and body. Since the prior art discloses the same patient population, (i.e. those with color treated hair), application of the product to perform a moisturizing property, would also necessarily also perform the same functional property of providing durability and stability to the hair color. “[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer.” *Atlas Powder Co. v.*

*Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977)

### ***Response to Arguments***

Applicant's arguments have been fully considered but they are not persuasive. Applicant argues:

**\*GB547 and Paul disclose the use of their respective compositions is as hair setting formulations and would not be applied prior to cleansing or rinsing.**

The Examiner respectfully disagrees. As discussed in the above rejections, both references disclose their formulations can be used as crème rinse compositions or hair conditioner compositions, which are both art recognized as being rinsed out after application. It is also noted by the Examiner that this limitation is only present in a dependent claim and not the independent claim.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA S. MERCIER whose telephone number is (571)272-9039. The examiner can normally be reached on 8:00am-4:30pm Mon through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Wax can be reached on (571) 272-0623. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melissa S Mercier/  
Examiner, Art Unit 1615

/Carlos A. Azpuru/  
Primary Examiner, Art Unit 1615